SONY

3-798-781-21 (2)

CD Radio Cassette-Corder

Operating Instructions

CFD-606

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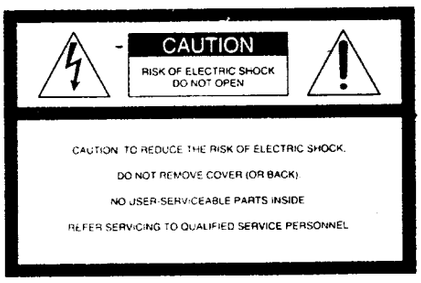
Warning

To prevent fire or shock hazard, do not expose the player to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

The use of optical instruments with this product will increase eye hazard.

For customers in Canada

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

Information

For customers in the United States

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Owner's Record

The model and serial numbers are located at the rear of the CD radio cassette-corder. Record the serial number in the space provided below. Refer to these numbers whenever you call your Sony dealer regarding this product.

Model No. CFD-606

Serial No. _____

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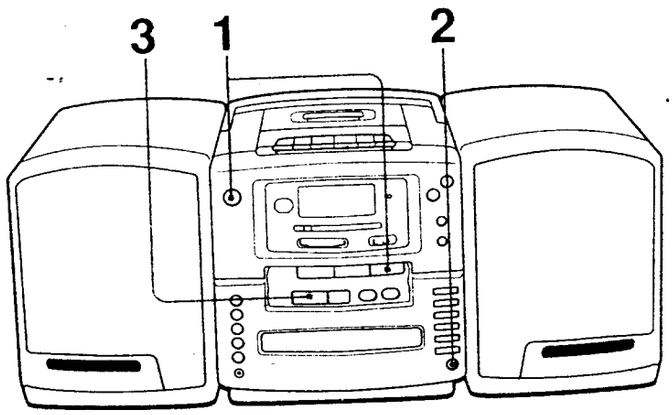
Playing a CD



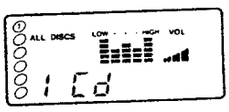
For hookup instructions, see pages 19-20.

1 POWER

CD

Turn on the power and press CD.

Display

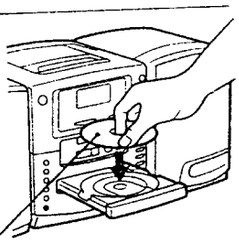


2 OPEN/ CLOSE ⏏

Press ⏏ OPEN/CLOSE and place the disc on the disc tray.

Note

You can't play 3 inch (8 cm) CDs even with an adaptor for single-CDs.

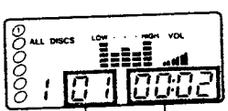


With the label side up

3 CD ►II

Press ►II.

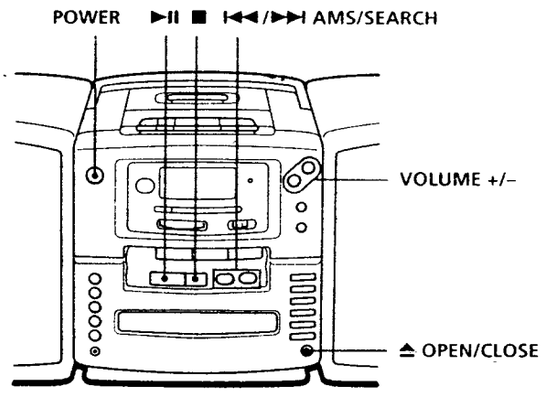
The disc tray closes and the player plays all the tracks once.



Track number

Playing time

Use these buttons for additional operations

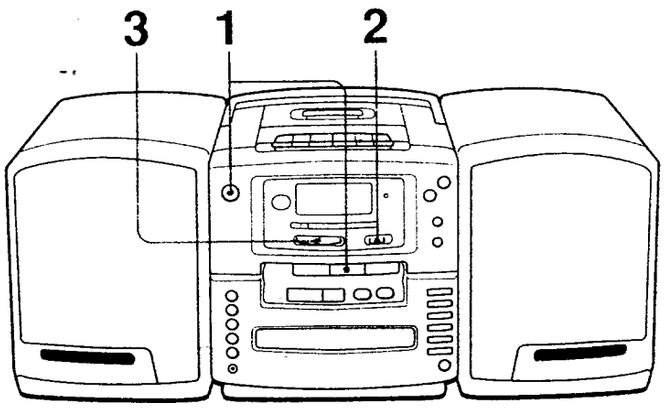


To	Press
Adjust the volume	VOLUME +/–
Stop playback	■
Pause playback	►II Press again to resume play after pause.
Go to the next track	►►I AMS/SEARCH
Go back to the previous track	I◄◄ AMS/SEARCH
Remove the CD	≜OPEN/CLOSE
Turn on/off the player	POWER

Tip

If "ALL DISCS" lights up, the player plays other CDs in numerical sequence. To play only one CD, press DISC MODE to select "1 DISC."

Listening to the radio



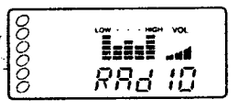
For hookup instructions, see pages 19-20.

1 POWER

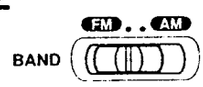
RADIO

Turn on the power and press RADIO.

Display



2

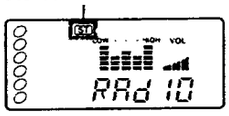


Set BAND to FM or AM.

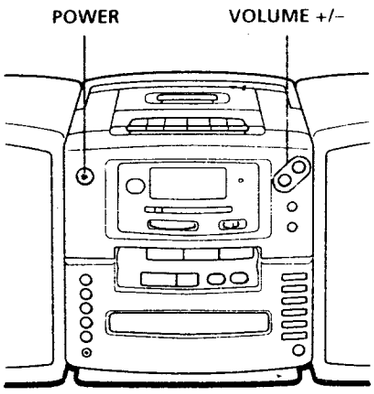
3

Turn TUNING to tune in the station you want.

Indicates an FM stereo broadcast.



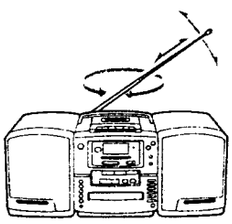
Use these buttons for additional operations



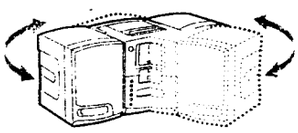
To	Press
Adjust the volume	VOLUME +/–
Turn on/off the radio	POWER

To improve broadcast reception

Reorient the antenna for FM. Reorient the player itself for AM.

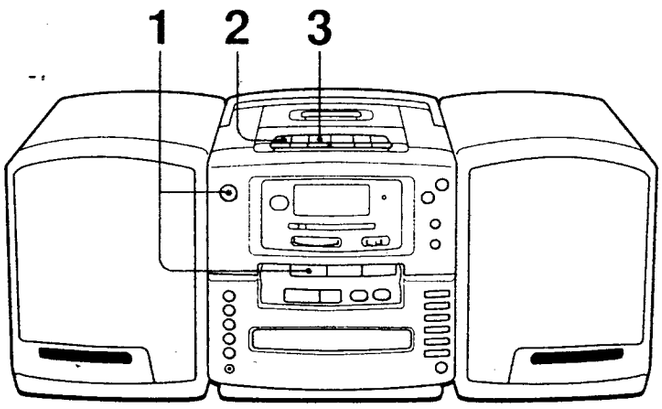


For FM



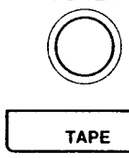
For AM

Playing a tape



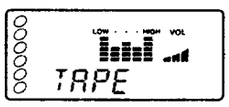
For hookup instructions, see pages 19-20.

1

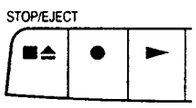


Turn on the power and press TAPE.

Display



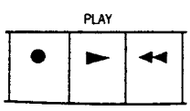
2



Press ■⏏ to open the tape compartment and insert a recorded tape. Use TYPE I (normal) tape only. Close the compartment.

With the side you want to play facing up.

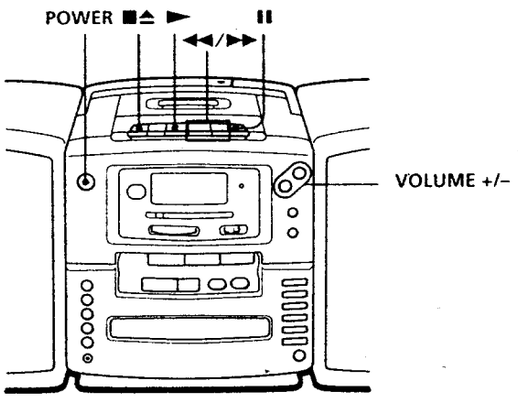
3



Press ►.

The player starts playing.

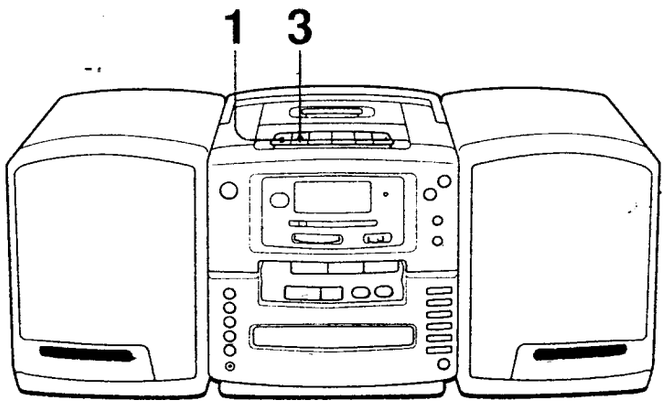
Use these buttons for additional operations



To	Press
Adjust the volume	VOLUME +/–
Stop playback	■⏏
Fast-forward or rewind the tape	►► or ◄◄ *
Pause playback	II Press the button again to resume play after pause.
Eject the cassette	■⏏
Turn on/off the player	POWER

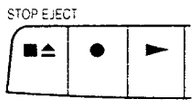
*After winding the tape with ►► or ◄◄, press ■⏏ to release it.

Recording on a tape

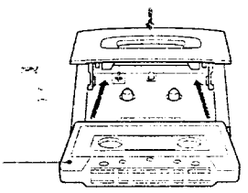


For hookup instructions, see pages 19-20.

1



Press ■⏏ to open the tape compartment and insert a blank tape. Use TYPE I (normal) tape only.



With the side you want to record on facing up

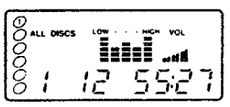
2

Turn on the power and select the program source you want to record.

Display

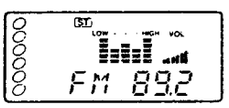
CD

To record from the CD player, press CD and insert a CD (see page 4) .

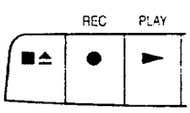


RADIO

To record from the radio, press RADIO and set BAND to FM or AM. Then tune in the station you want (see page 6.)



3

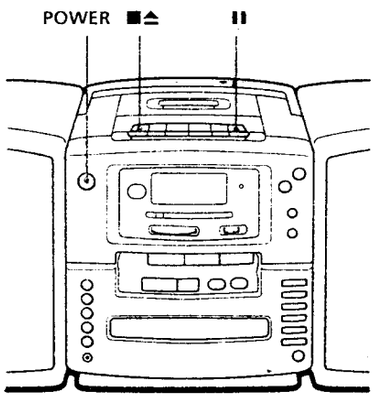


Press ● to start recording. (► is depressed automatically.)

Tips

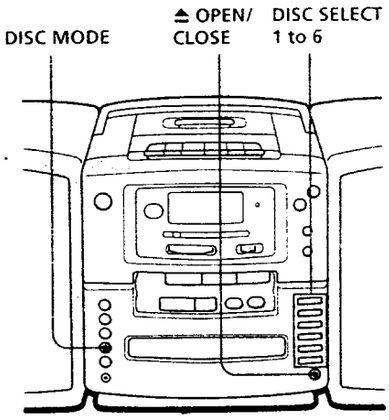
- Adjusting the volume or the audio emphasis (see page 21) will not affect the recording level.
- For the best results, use the AC power source as a power sourse.
- If the AM program makes a whistling sound after you've pressed ● in step 3, set the ISS (Interference Suppress Switch) at the rear to the position that most decreases the noise. Normally set the switch to "2."
- To erase a recording, proceed as follows:
  1 Disconnect the microphone if connected at the MIX MIC jack.
  2 Turn on the power and then press TAPE.
  3 Press ●.

Use these buttons for additional operations



To	Press
Stop recording	■⏏
Pause recording	II Press the button again to resume recording.
Turn on/off the player	POWER

Playing multiple discs



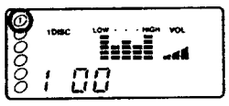
You can play up to 6 CDs one after another.

1 Press one of the DISC SELECT 1 to 6 buttons to select the disc tray.

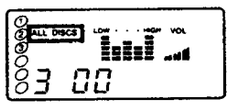
2 Press ⏏ OPEN/CLOSE on the player and place a CD on the disc tray.

3 Press ⏏ OPEN/CLOSE on the player to close the disc tray.

The number of the disc tray where the CD is inserted appears in the display.
To insert more discs, repeat steps 1 to 3.



4 Press DISC MODE to select "ALL DISCS."



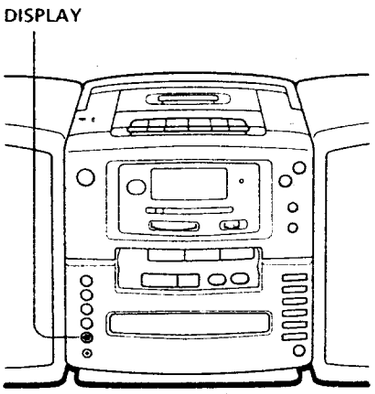
5 Press one of the DISC SELECT 1 to 6 buttons to select the disc you want to start playing.

Tip

To play only one CD, press DISC MODE to select "1 DISC."

Using the display

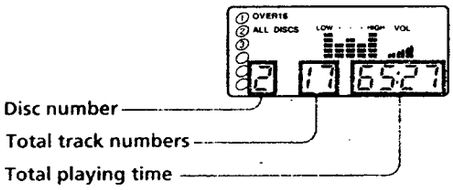
You can check information about the disc using the display.



Checking the total track numbers and playing time

Press DISPLAY in stop mode.

If the disc has more than 16 tracks, "OVER 16" appears in the display.



Checking the remaining time

Press DISPLAY while playing a disc.

The track numbers in the music calendar disappear after they are played.

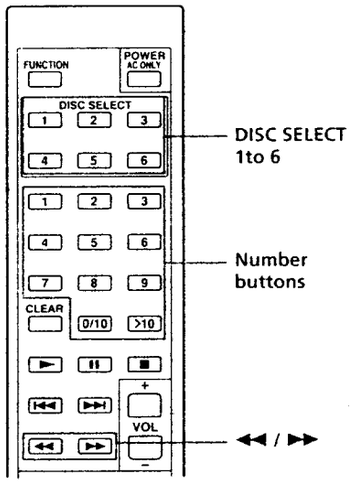
To display	Press DISPLAY
Remaining time on the current track*	Once
Remaining time on the disc and the number of tracks left**	Twice
Playing time and the current track number	Three times

* For a track whose number is more than 16 the remaining time appears as "– –:– –".

** If the remaining tracks are over 99, "– –" appears instead of the track number. If the remaining time is over 99 minutes, "– –:– –" appears instead of the remaining time.

Locating a specific track

You can quickly locate any track using the number buttons. You can also find a specific point in a track while playing a disc.



Note

You cannot start play if "PGM" or "SHUF REP" is lit in the display. Turn off the indication by pressing ■ .

Tip

When you locate a track numbered over 10, press > 10 first, then the corresponding number buttons.

Example:

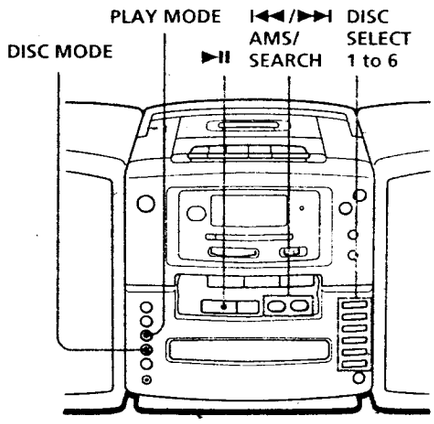
To play track number 23, press >10 first, then 2 and 3.

To locate	Press
a specific track directly	one of the DISC SELECT 1 to 6 buttons to select the disc and a number button of the track.
a point while listening to the sound	▶▶ (forward) or ◀◀ (backward) while playing and hold down until you find the point.
a point while observing the display	▶▶ (forward) or ◀◀ (backward) in pause and hold down until you find the point. When you use the buttons on the player, use ⏮ / ⏭ AMS/SEARCH.

Playing tracks repeatedly

(Repeat Play)

You can play tracks repeatedly in normal, shuffle or program play modes (see pages 16 - 17.).



1 Press PLAY MODE until the repeat mode you want appears in the display.

To repeat	Select
a single track	REP 1
all the tracks	REP ALL
tracks in random order	SHUF REP ALL
programmed tracks	PGM REP and then program tracks (see steps 3-5 on page 16).

2 Do either of the following to start repeat play:

- **When you've selected REP1,** select the disc by pressing one of the DISC SELECT 1 to 6 buttons, then select the track by pressing I◄◄ / ►►I AMS/SEARCH. Then press ►II.
- **When you've selected REP ALL,** press DISC MODE to select "ALL DISCS" (to repeat all discs) or "1 DISC" (to repeat only 1 disc). If you select "1 DISC," then press one of the DISC SELECT 1 to 6 buttons to select the disc you want.
- **When you've selected SHUF REP ALL,** press DISC MODE to select "ALL DISCS" (to repeat tracks in all discs in different order) or "1 DISC" (to repeat only one disc in different order). Then, press ►II .
- **When you've selected PGM REP ALL,** press ►II.

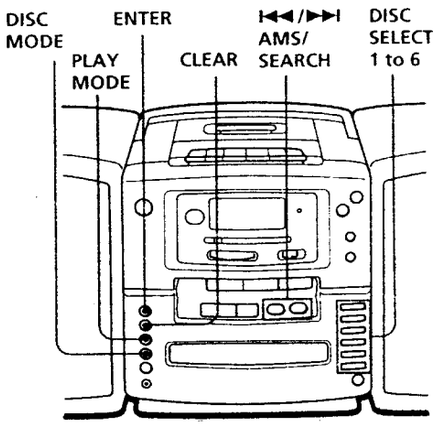
Tip

You can select the track on the remote. Press number button of the track instead of I◄◄ / ►►I AMS/ SEARCH and ►II.

Creating your own program

(Program Play)

You can make a program of up to 20 tracks from all the CDs in the order you want them to be played.



Tips

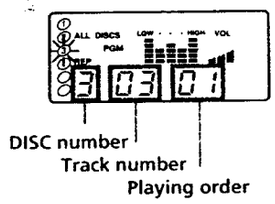
- You can select the track on the remote. Press the number buttons for the tracks you want to program in the order you want.
- You can program one whole CD as one program step.
  Repeat step 3 and select another disc tray by pressing one of the DISC SELECT 1 to 6 buttons.

1 Press PLAY MODE until "PGM" appears in the display.

2 Press DISC MODE to select "ALL DISCS".

3 Press one of the DISC SELECT 1 to 6 buttons to select the disc tray.

4 Press ⏮/⏭ AMS/SEARCH repeatedly until the track number you want to program appears in the display. Then press ENTER. To program additional tracks, repeat this step.



You can program up to 20 tracks.

If you made a mistake, press CLEAR and re-enter the track number.

To program additional tracks from another disc, repeat steps 3 and 4.

5 Press ► to start program play.

To cancel Program Play

Press PLAY MODE until no indication appears in the display.

To check the order of tracks before play

Press ENTER.

Every time you press the button, the track number appears in the programmed order.

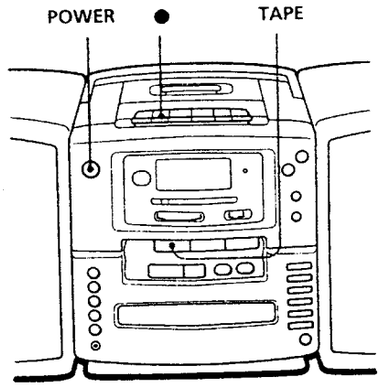
To change the current program

To	Do this
Erase the last track in the program	1 Press CLEAR. Every time you press the button, the last track in the program is cleared. 2 Re-enter the track numbers.
Change the whole program completely.	Press ■ . Then create a new program following the programming procedure.

Tips

- You can play the same program again, since the program is saved until you open the disc tray.
- You can record your own program. After you've created the program, insert a blank tape and press ● to start recording.
  When recording from two or more CDs, the player continues recording while the CDs are changed. As a result, a blank on the tape will be longer.

Recording through a microphone/Using as a PA system



You can record sound using a microphone (not supplied) or use the player as a public address system.

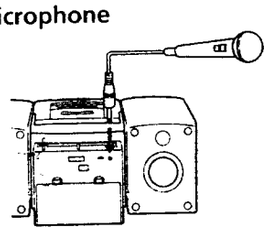
Tip

You can mix CD or radio sounds and record them by adding your voice or other audio through the microphone.

Notes

- Acoustic feedback (howling) tends to occur when you use a microphone with echo function.
- If acoustic feedback (howling) occurs, turn down the volume or move the microphone away from the speaker.

Recording through a microphone



1 Plug the microphone into the MIX MIC jack and turn on the microphone if it has a power switch.

2 Turn on the power.

3 Press TAPE.

4 Insert a cassette for recording into the deck and press ● to start recording.

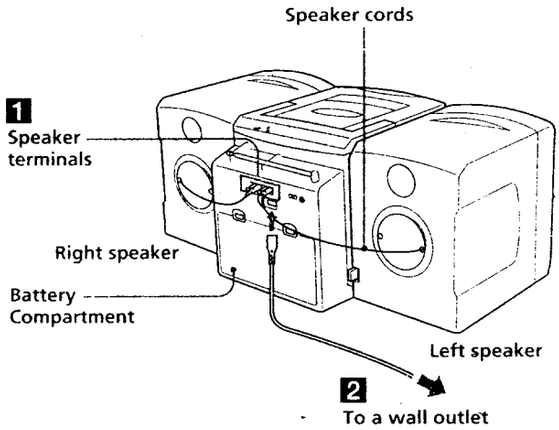
Using as a PA system

1 Do steps 1 and 2 above.

2 Sing or speak into the microphone and adjust the volume.

Hooking up the system

Make sure you turn off the power before making any connections.

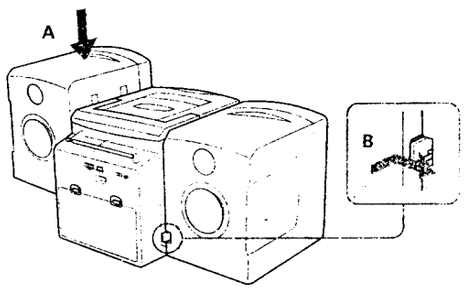


Tip

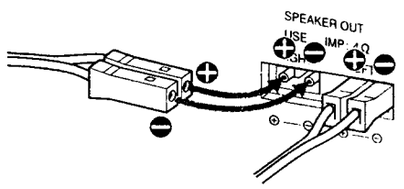
To detach the speakers, unlock speaker (see B on the diagram) and slide the speaker box all the way up and away from the player.

1 Hooking up the speakers

1 Align the grooves and slide the speaker box down until it snaps into place A.



2 Connect the black wires to (–) minus and the red wires to (+) plus terminals; the right speaker wires to the R and the left speaker wires to the L terminals.

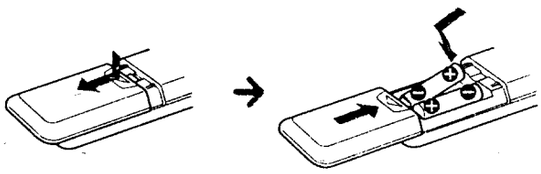


continued

2 Connecting the AC power cord

Insert one end of the supplied AC power cord to the AC IN socket located at the rear of the player, and the other end to the wall outlet.

3 Inserting batteries into the remote



Insert two size AA (R6) batteries (not supplied)

Replacing batteries

With normal use, the batteries should last for about six months. When the remote no longer operates the player, replace all the batteries with new ones.

Notes

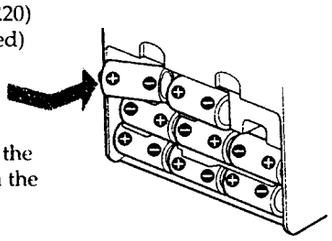
- When you operate the player on batteries, the backlight in the display does not light.
- When you operate the player on batteries, you can't turn on the player using the remote.

Tip

Replace the batteries when the OPR/BATT indicator dims or when the player stops operating. Replace all the batteries with new ones. Before you replace the batteries, be sure to take out the CD(s) from the player.

Using the player on batteries

Insert eight size D (R20) batteries (not supplied) into the battery compartment.

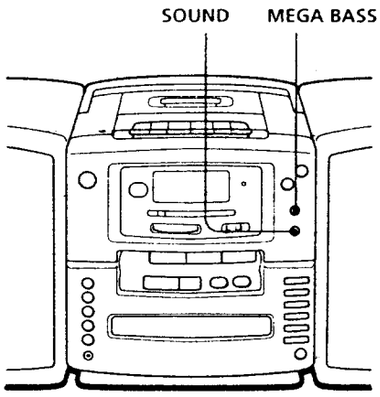


To use the player on batteries, disconnect the AC power cord from the player.

Selecting the audio emphasis

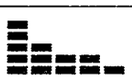
(Sound Mode/MEGA BASS)

You can adjust the audio emphasis of the sound you are listening to.



Selecting the sound characteristic

Press SOUND to select the audio emphasis you want.

Choose	To get
	light, bright sounds emphasizing high and middle range audio
	Powerful, clean sounds, emphasizing low and high range audio.
	percussive sounds, emphasizing bass audio.
	The presence of vocals, stressing middle range audio
Normal mode (no indication)	the whole dynamic range for music such as classical music

Reinforcing the bass sound

Press MEGA BASS.

"MEGA BASS" appears in the display. To return to normal sound, press the button again.

Precautions

On safety

- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the player, unplug the player, and have it checked by qualified personnel before operating it any further.

On power sources

- For AC operation, use the supplied AC power cord; do not use any other type.
- Unplug the player from the wall outlet when it is not to be used for an extended period of time.
- For battery operation, use eight size D (R20) batteries.
- When the internal batteries are not to be used, remove them to avoid damage that can be caused by battery leakage or corrosion.
- The nameplate indicating operating voltage, power consumption, etc. is located at the rear.

On placement

- Do not leave the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the player to operate properly and prolong the life of its components.
- If the player is left in a car parked in the sun, be sure to choose a location in the car where the player will not be subjected to the direct rays of the sun.
- Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or spring-wound watches away from the player to prevent possible damage from the magnet.

On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the CD player section. Should this occur, the player will not operate properly. In this case, remove the CD and wait about an hour for the moisture to evaporate.
- If the player has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a CD or cassette.

If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

Notes on CDs

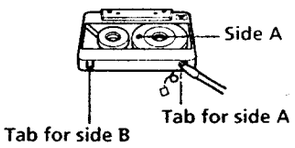
- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.

- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
- After playing, store the CD in its case.

If there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.

Notes on cassettes

- Break off the cassette tab from side A or B to prevent accidental recording. If you want to reuse the tape for recording, cover the broken tab with adhesive tape.



- To record on a tape with its tab broken off, cover the respective tab hole for side A or B with adhesive tape.
- The use of a cassette with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

Troubleshooting

	Symptom	Remedy
General	The power does not come on.	• Connect the AC power cord securely. • Make sure the batteries are inserted correctly. • You can't turn on the player using the remote when you operate the player on batteries.
	There is no audio.	• Make sure the display window is displaying the function you want to operate. • Adjust the volume. • Unplug the headphones when listening through speakers.
Radio	The audio is weak or has poor quality.	• Replace all the batteries with new ones if they are weak. • Move the player away from the TV. • If you are using the remote while listening to AM radio, noise may be heard. This is unavoidable.
	The picture of your TV becomes unstable.	• If you are listening to an FM program near the TV with an indoor antenna, move the player away from the TV.
CD Player	"no disc" lights in the display even when a CD is in place.	• Insert the CD with the label surface up.
	The CD does not play and "Error" lights in the display.	• Make sure that the disc tray is closed. • Place the CD with the label surface up. • Clean the CD. • Take out the CD and leave the disc tray open for about an hour to dry moisture condensation. • Make sure "CD" appears in the display.
	The sound drops out.	• Reduce the volume. • Clean the CD, or replace it if the CD is badly damaged • Place the player in a location free from vibration.
Tape Player	The tape does not move when you press an operation button.	• Close the cassette compartment securely.
	The REC ● button does not function/The tape does not play.	• Make sure the safety tab on the cassette is in place. • Make sure that "TAPE" appears in the display.
	The tape does not erase completely.	• Clean the erasing heads (see page 26.) • Replace all the batteries with new ones if they are weak.

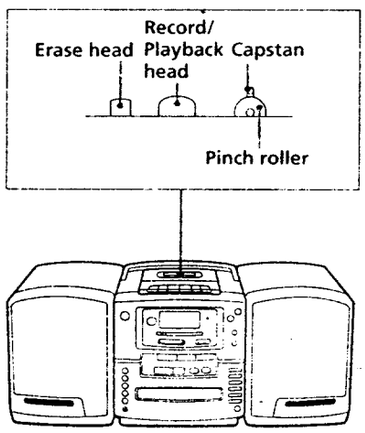
	Symptom	Remedy
Tape Player	The tape does not record.	• Make sure the tape is inserted properly. • Make sure the safety tab of the cassette is in place.
	The audio is weak/The audio quality is poor.	• Clean the heads, pinch rollers and capstans (see page 26). • Demagnetize the heads using a demagnetizer (see page 26).
	The sound is distorted.	• TYPE II (CrO_2) or TYPE IV (metal) tape is being used. → Use TYPE I (normal) tape only.
Remote	The remote does not function.	• Replace all the batteries in the remote with new ones if they are weak. • Make sure that you are pointing the remote at the remote sensor on the player. • Remove any obstacles in the path of the remote and the player. • Make sure the remote sensor is not exposed to strong light such as direct sunlight or fluorescent lamp light. • Move closer to the player when using the remote.

After trying the above remedies, if you still have problems, unplug the AC power cord and remove all the batteries. After all the indications in the display disappear, plug the power cord and insert the batteries again. If the problem persists, please consult your nearest Sony dealer.

Maintenance

Cleaning the tape heads and tape path

Wipe the heads, the pinch rollers and the capstans with a cleaning swab slightly moistened with cleaning fluid or alcohol after every 10 hours of operation for optimum playback and recording quality. To make the best possible recording, however, we recommend that you clean all surfaces over which tape travels before each recording.



After cleaning, insert a tape when the areas cleaned are completely dry.

Demagnetizing the tape heads

After 20 to 30 hours of use, enough residual magnetism will have built up on the tape heads to begin to cause loss of high frequency sound and hiss. At this time, you should demagnetize the heads and all metal parts in the tape path with a commercially available tape head demagnetizer.

Cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzene.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 4-ohm loads, both channel driven from 150 - 15,000 Hz; rated 2 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other Specifications

CD player section

System
- Compact disc digital audio system

Laser diode properties
- Material: GaAlAs
- Wave length:780 nm
- Emission duration: Continuous
- Laser output: Less than 44.6 µW (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)

Spindle speed
- 200 r/min (rpm) to 500 r/min (rpm) (CLV)

Number of channels
- 2

Frequency response
- 20 - 20,000 Hz +0.5/–2 dB

Wow and flutter
- Below measurable limit

Radio section

Frequency range
- FM: 87.6 - 108 MHz
- AM: 531 - 1,602 kHz (Australian model)
- 530 - 1,710 kHz (Other models)

Aerials
- FM: Telescopic aerial
- AM: Built-in ferrite bar aerial

Cassette-corder section

Recording system
- 4-track 2 channel stereo

Fast winding time
- Approx. 140s (sec.) with Sony cassette C-60

Frequency response
- TYPE I (normal): 80 - 10,000 Hz

General

Speaker
- Full range: 10 cm (4 in.) dia., cone type
- Tweeter: 2 cm (4/5 in.) dia.

Inputs
- Mixing microphone input jack (minijack):
- Sensitivity 2.51 mV
- For low impedance microphone

Outputs
- Headphones jack (stereo minijack)
- For 32 ohms impedance headphones

Power output (excluding US model)
- 3 W + 3 W (at 4 ohms, 10 % harmonic distortion)

Power requirements
- For CD radio cassette-corder:
- 240 V AC, 50 Hz (Australian model)
- 120 V AC, 60 Hz (Other models)
- 12 V DC, 8 D (R20) size batteries
- For remote commander:
- 3 V DC, 2 AA (R6) size batteries

Power consumption
- AC 25 W

Battery life
- For CD radio cassette-corder:

FM recording
Sony SUM-1 (NS): approx. 11 h
Sony alkaline AM1: approx. 16 h
Tape playback
Sony SUM-1 (NS): approx. 7 h
Sony alkaline AM1: approx. 11 h
CD playback
Sony SUM-1 (NS): approx. 3 h
Sony alkaline AM1: approx. 5 h

Dimensions
- approx. 573 × 254 × 333 mm (w/h/d)
- (22 ¾ × 10 × 13 ⅛ inches) (incl. projecting parts)

Mass
- approx. 8.8 kg (19 lb. 6 oz) (incl. batteries)

Supplied accessories
- AC power cord (1)
- Remote commander (1)

Design and specifications are subject to change without notice.

Optional accessories

Sony DYNAMIC MICROPHONE series
Sony MDR headphone series

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